

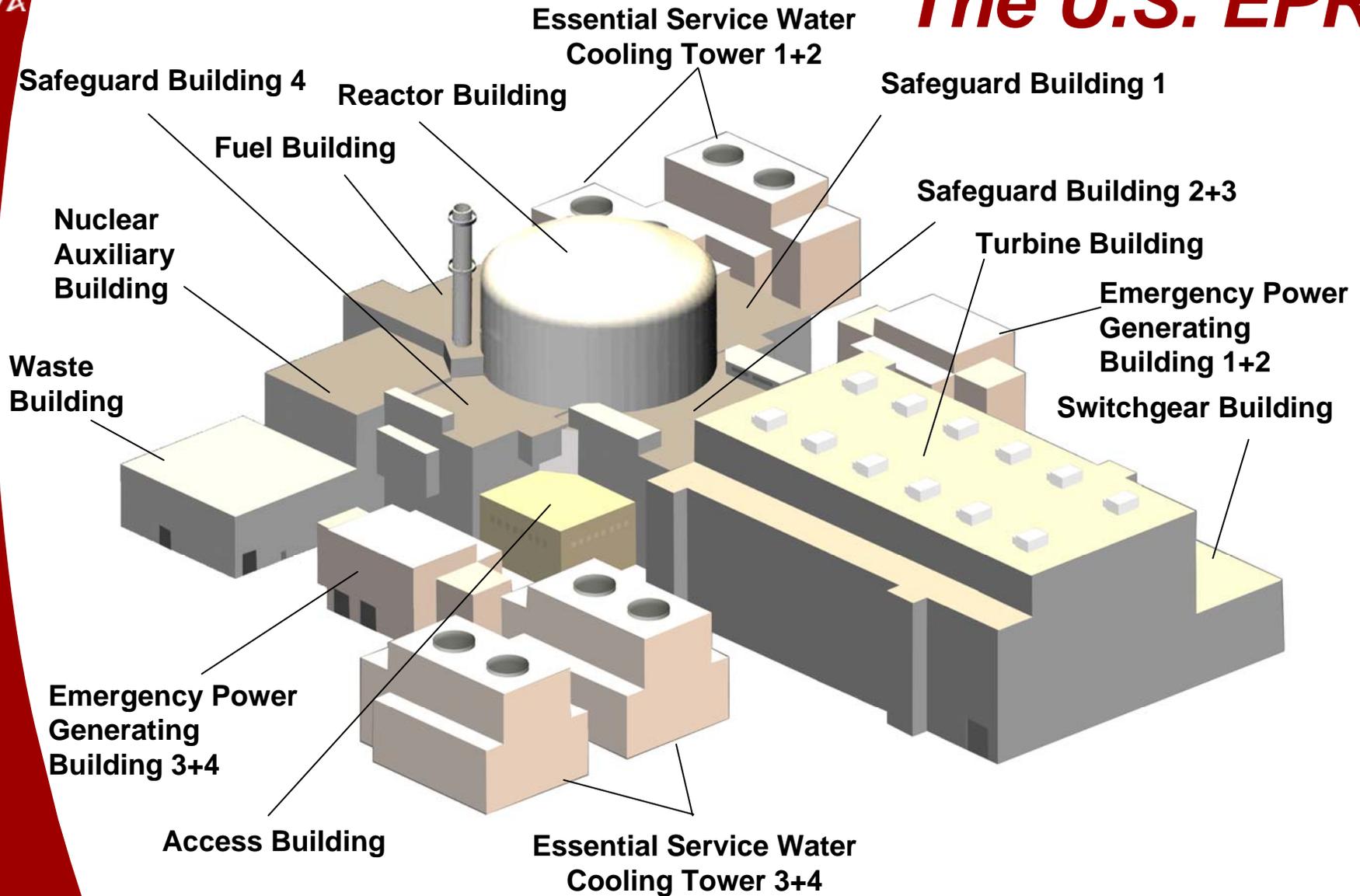
***PLANS AND SUPPORT FOR A
PRISMATIC HIGH-
TEMPERATURE
GAS-COOLED REACTOR
DESIGN***

**Finis H. Southworth
Chief Technology Officer
AREVA NP Inc.
February 20, 2008**

AREVA'S Near-Term Strategy

- > Deploy new nuclear baseload generation**
 - ◆ EPR plants under construction at Olkiluoto and Flamanville**
 - ◆ Application for U.S. EPR design certification submitted December 11, 2007**
 - ◆ Four Combined License applications in preparation**

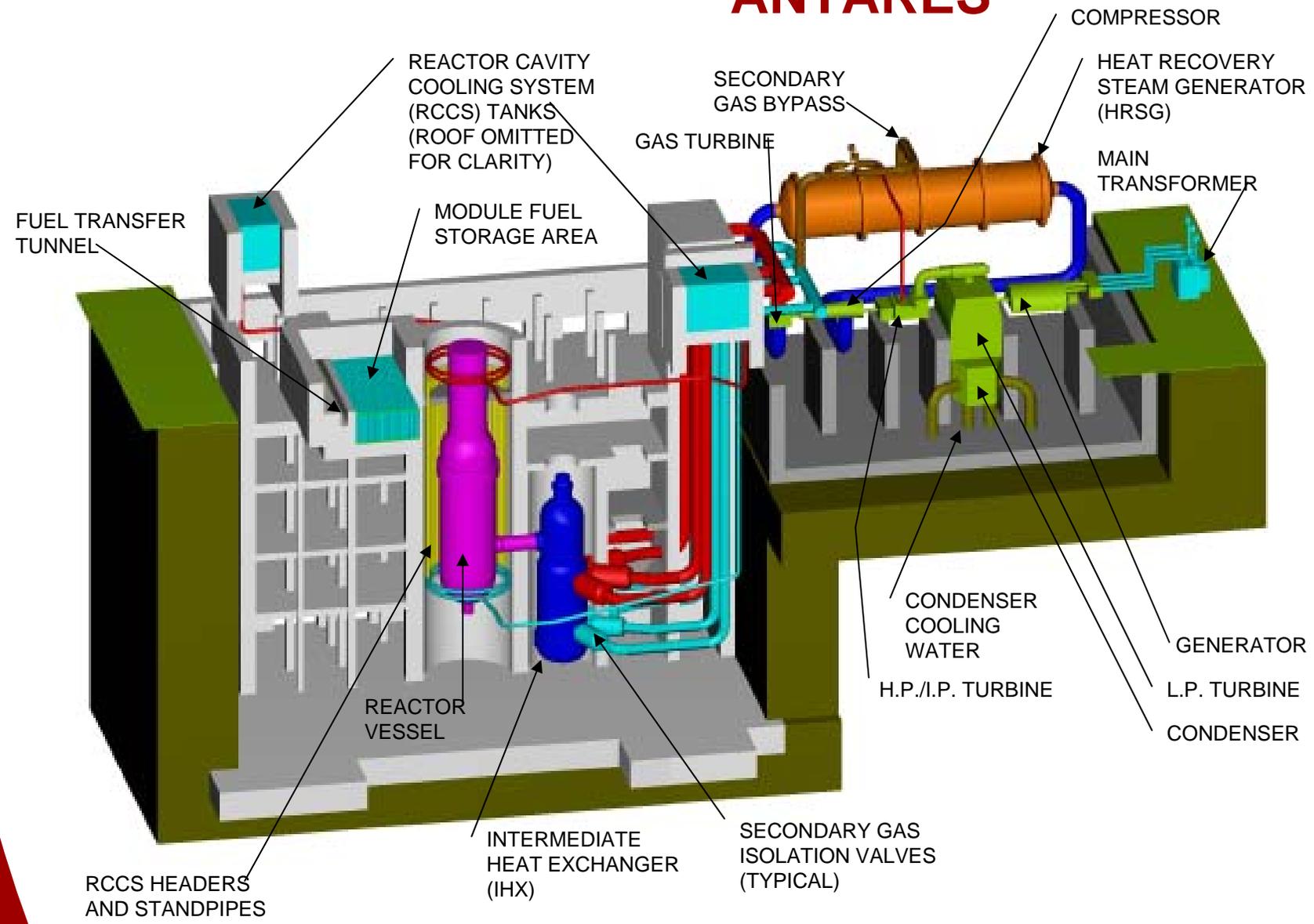
The U.S. EPR



AREVA'S Long-Term HTR Strategy

- > Develop ANTARES high-temperature, gas-cooled, prismatic reactor design**
- > Plan for deployment consistent with market demand for CO₂-free energy for electric and non-electric applications**

ANTARES



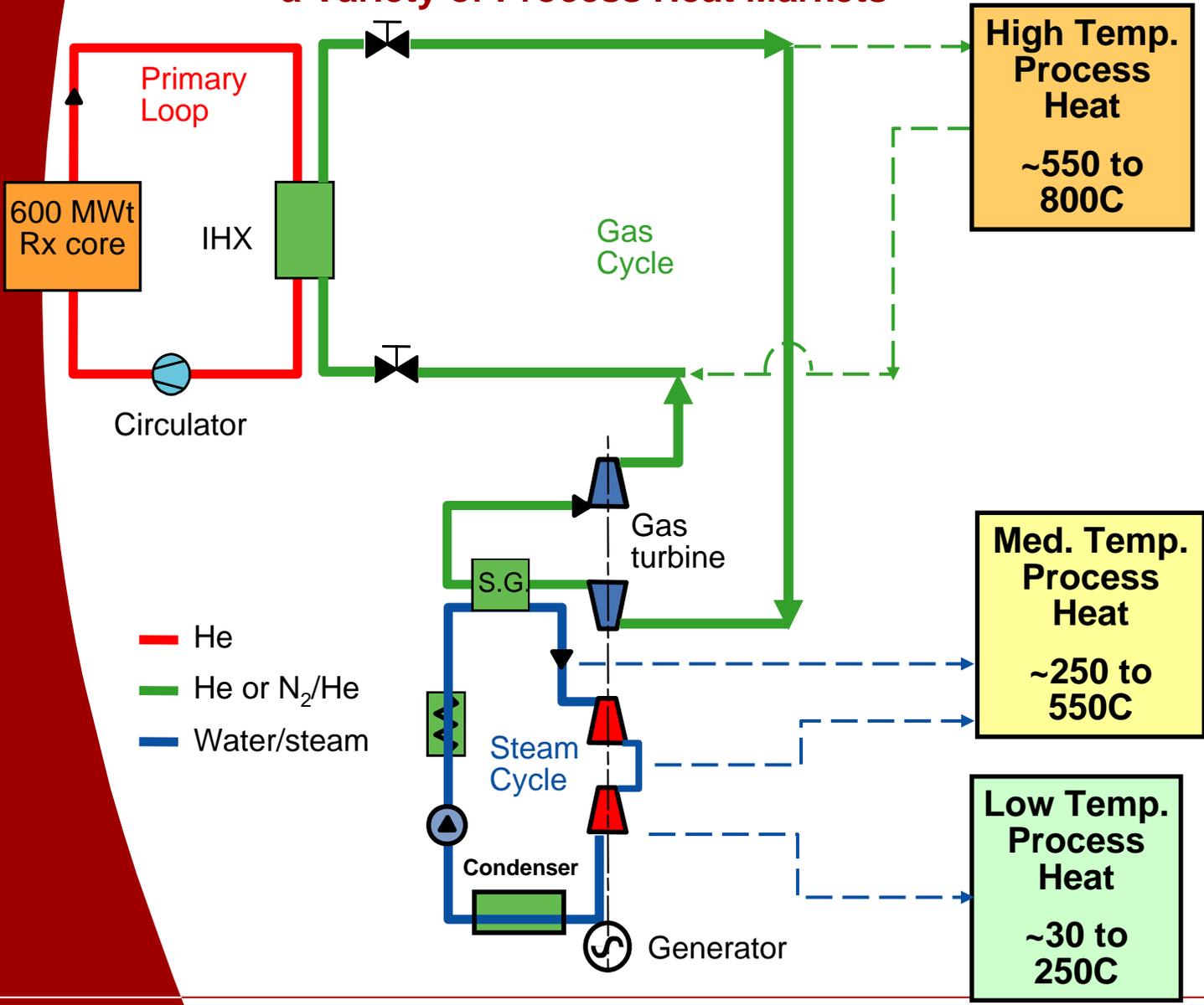
CUTAWAY VIEW OF REFERENCE PLANT

Benefits of HTR Technology

- > Small efficient electrical output**
 - ◆ Low cost power for small markets
 - ◆ Incremental capacity tailored to growth

- > Flexibility for multiple process heat applications**
 - ◆ Petroleum extraction from shales or heavy oils
 - ◆ Chemical processing
 - ◆ Hydrogen production

AREVA HTR Concept Can Serve a Variety of Process Heat Markets



Market Applications

High Temp. Process Heat
~550 to 800C

- Hydrogen-SI or HTE
- Hydrogen-SMR

Med. Temp. Process Heat
~250 to 550C

- Oil Shale
- Oil Sands
- Coal Gasification
- Coal Liquefaction
- Biomass

Low Temp. Process Heat
~30 to 250C

- District Heating
- Desalination

Future HTR Development

- > AREVA supports HTR technology and licensing strategy development**
- > NGNP Program contributes to technical, infrastructure, and regulatory progress**
- > ANTARES deployment will support commercial demand for HTR capabilities**